

## CASE SUMMARY

Case #2016/0824

**Complainant:**



Muncie, Indiana 47302



**Respondent:**

Unknown

-003

1. On, May 16, 2016, the complainant contacted the Compliance Officer of the Office of Indiana State Chemist (OISC) to report a bee kill. She stated all of her hives were involved and she suspected pesticides.
2. On May 16, 2016, I, Agent Brian Baker of OISC, made phone contact with the complainant in this case. I set up a meeting time for the next day. The complainant told me she was unable to meet with me but [REDACTED] would meet with me at her home and open the most affected bee box for me. I asked that a freezer bag of dead bees be collected and frozen for me.
3. On May 17, 2016, I met with [REDACTED]. I identified myself verbally and with OISC credentials. I explained the role of OISC in this case and issued a Notice of Inspection. I checked the area around the three hives and found it trimmed well but also replete with weeds (figs. 2-4). I asked [REDACTED] what lawn care and household pesticides he used and he was able to show me the pesticide containers and labels of the two products. The pesticide products used by the complainant were:
  - *Drexel, EPA Reg# 19713-526, active ingredient=41% glyphosate*
  - *Gordons Tri-Mec, EPA Reg. #2217-539-33955, active ingredients= 2-4D 7.5%, Mecprop 1.83%, Dicamba 0.84%.*



Fig. 1



Fig. 2



Fig. 3




Fig. 4

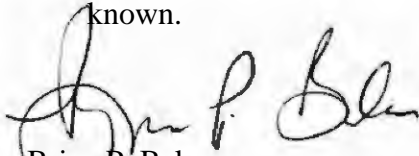
- Figure 1 is the complainant's home in the right side foreground and the bee hives in the center against a tree/shrub line.
- Figure 2 shows the complainant's three bee hives. The hive to the right with the heart painted on it was swabbed on top and on an inside frame rail.
- Figure 3 shows the grassy and weedy area around the hives.
- Figure 4 shows the neatly trimmed area behind the bee hives.

4. [REDACTED] opened the hives and I was able to collect an acetone swab off one of the side rails of a frame. I also collected a template swab off the top of the hive. The swabs were tagged and turned into the OISC Residue Laboratory for analysis.
5. I asked [REDACTED] what the hives were treated with and he told me they had not treated for beetles or mites this year. [REDACTED] gave me the freezer bag of frozen dead bees that I had requested in my first phone contact.
6. In checking the properties in and around the complainant's property, I located one field which had been planted recently by [REDACTED] E. Muncie, IN. I made contact with [REDACTED] and he was able to provide a seed tag from the seed corn he planted in the aforementioned field(s). The following information was on the seed tag:
  - Pioneer Supreme EX-Brand Seed SCS1085. There is a caution statement which reads;  
*"This seed is treated at the manufacturer's recommended rates with Fludioxonil, Mefenoxam, Thiabendazole, Azoxystrobin and Tebuconazole fungicides, Clothianidin insecticide and Bacillus Firmus."*
7. On August 9, 2016, I received the final analysis results from the OISC Laboratory on the samples submitted in this case. The chart which follows reflects the results.

**OFFICE OF INDIANA STATE CHEMIST**  
*Pesticide Residue Laboratory*  
*Lab Report*

Case # 2016/0824		Investigator: Brian Baker		
Sample #	Sample Description	Sample Matrix	Amount Found	
			Neonicotinoids*	General Screen
2016-323596	Trip Blank Swab- Acetone	Swab	BDL	NA
2016-323597	Control Swab of Garage Window - Acetone	Swab	BDL	NA
2016-323598	Template Swab of Bee Box Lid - Acetone	Swab	BDL	NA
2016-323599	Free Swab of Interior Frame in Bee Box - Acetone	Swab	BDL	NA
2016-323600	Ziploc Bag of Dead Frozen Bees	Bees	Detected Fipronil at 30.0 ppb	No pesticides detected.
<small>*These neonicotinoids were tested: Clothianidin, Acetamiprid, Dinotefuran, Thiamethoxam, Imidacloprid, Thiacloprid, Fipronil.</small>				
<small>PPM= Parts Per Million; PPB=Parts Per Billion; CONF=Confirmed; LOQ=Limit of Quantitation; BDL=Below detection Limits: this analyte was not detected using the standard analytical methods employed by OISC; BQL=Below quantification limits: this analyte was detected however the amount was lower than the quantification limit established using the standard analytical methods employed by OISC</small>				
LOQ	Swabs	1 ng/swab		
LOQ	Bees	~0.3 ppb		
Signature			Date	8/9/16

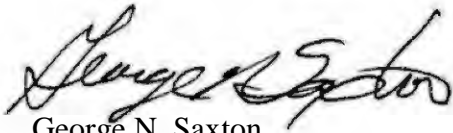
8. The analysis results on all samples submitted except for the dead bees were all below detection limits. The dead bee samples contained 30.0ppb of the active ingredient "fipronil". I spoke to the complainant and gave examples of some of the common products containing the active ingredient fipronil, such as dog flea collars and termite treatments but the complainant could not think of any way that the bees could have come in contact with any fipronil products.
9. In this case, a large number of bees died in several hives owned by the complainant in this case (figs.1-4). The sample of dead bees was tested for neonicotinoids commonly used in the agricultural community and to treat for common household pests. The dead bee sample was positive for the active ingredient fipronil. The source of the fipronil in this case is not known.



Brian P. Baker  
Investigator

Date: August 15, 2016

**DISPOSITION:** No violation of the Indiana Pesticide Use and Application Law was documented at this time.



George N. Saxton  
Compliance Officer

Final Date: October 6, 2016